GenCore version 5.1.3

OM nucleic - nucleic search, using sw model

Run on: March 29, 2003, 19:47:07 ; Search time 47.5859 Seconds
(without alignments)
7950.588 Million cell updates/sec

Title: US-09-988-971-1_COPY_517_684
Perfect score: 168
Sequence: 1 gccacagccgtggccctggg.....gcgtccacgtggccaaagtc 168

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2185239 seqs, 1125999159 residues

Total number of hits satisfying chosen parameters: 4370478

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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24: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	168	100.0	737	24	AAL44090	Mouse MARS short i
2	168	100.0	786	24	AAL44089	Human modulator of
3	168	100.0	2049	23	AAS74750	DNA encoding novel
4	166.4	99.0	837	21	AAC77202	Human ORFX ORF2757
5	166.4	99.0	1183	24	ABK61465	Human cDNA encodin
6	124.8	74.3	1348	24	AAL44087	Mouse modulator of
7	80.8	48.1	211	23	AAS70181	DNA encoding novel
8	43.6	26.0	2298	24	ABK83935	Human cDNA differe
9	39	23.2	2109	22	AAS02049	DNA encoding molec
10	39	23.2	2665	24	ABK83738	Human cDNA differe
11	39	23.2	2665	24	ABL65189	Lung cancer relate
12	34.4	20.5	2032	21	AAZ46491	PKA substrate, Src
c 13	33	19.6	577	22	ABA31398	Probe #9864 for ge
c 14	33	19.6	577	22	AAI44415	Probe #13101 used
15	33	19.6	3311	18	AAT70377	Cytohesin 1. Homo
16	33	19.6	3311	24	ABK84102	Human cDNA differe
17	33	19.6	3311	24	ABQ66425	Human cytohesin-1
c 18	33	19.6	6933	23	AAS75141	DNA encoding novel
19	32.2	19.2	183	24	ABL61214	Human nucleotide f
20	32.2	19.2	1416	24	ABL61215	Rat/human fusion c
21	32.2	19.2	1542	24	ABL61216	Rat/human fusion c
22	32.2	19.2	1926	24	ABK83940	Human cDNA differe
23	32.2	19.2	2015	24	ABK83939	Human cDNA differe
24	32.2	19.2	2015	24	ABL66673	Lung cancer relate
25	32.2	19.2	2350	22	AAK53035	Human polynucleoti
c 26	31.6	18.8	6855	24	AAS16827	Human T-type calci
27	31.6	18.8	48667	24	ABK51628	Human transporter
c 28	31.4	18.7	6232	13	AAQ29269	Human calcium chan
c 29	31.2	18.6	123	22	ABA40888	Probe #19354 for g
c 30	31.2	18.6	123	22	AAI57031	Probe #25717 used
c 31	31.2	18.6	123	22	AAC89277	Human brain T calc
32	31.2	18.6	1574	21	AAZ86794	Human protein kina
33	31.2	18.6	1574	22	AAD11845	Human protein kina
34	31	18.5	3663	18	AAT72320	Embryonic stem cel
c 35	30.8	18.3	3401	20	AAX52257	Protein PRO247 cDN
c 36	30.8	18.3	3401	22	AAS46130	Human DNA encoding
c 37	30.8	18.3	3401	22	AAF72415	Human PRO247 cDNA.
c 38	30.8	18.3	3401	24	ABL95580	Human angiogenesis
c 39	30.8	18.3	3401	24	ABL88091	Human PRO247 cDNA
c 40	30.8	18.3	3401	24	ABK33597	cDNA encoding huma
41	30.8	18.3	14705	23	AAS59523	Propionibacterium
42	30.6	18.2	1060	20	AAV80580	Kidney injury asso
c 43	30.4	18.1	621	24	ABK34974	Human cDNA encodin
c 44	30.4	18.1	3236	24	ABK84672	Human cDNA differe
45	30.4	18.1	13336	23	AAS59554	Propionibacterium

ALIGNMENTS

RESULT 1
AAL44090
ID AAL44090 standard; cDNA; 737 BP.
XX
AC AAL44090;
XX
DT 03-OCT-2002 (first entry)
XX
DE Mouse MARS short isoform protein coding sequence.
XX
KW Mouse; gene; ss; gene therapy; modulator of antigen receptor signalling;
KW MARS; tumour suppressor gene; Scr-like adaptor protein; SLAP;
KW myeloid malignancy; acute myelogenous leukaemia; autoimmune disorder;
KW immunosuppression; myeloproliferative disorder; breast cancer.
XX
OS Mus sp.
XX
FH Key Location/Qualifiers
FT CDS 1..633
FT /*tag= a
FT /product= "Mouse MARS short isoform protein"
XX
PN WO200242452-A2.
XX
PD 30-MAY-2002.
XX
PF 26-NOV-2001; 2001WO-CA01662.
XX
PR 27-NOV-2000; 2000CA-2324663.
XX
PA (HOSP-) HOSPITAL FOR SICK CHILDREN.
XX

PI Mcglade JC, Loreto MP;
XX
DR WPI; 2002-566564/60.
DR P-PSDB; AAO15458.
XX
PT New isolated modulator of antigen receptor signaling protein or its
PT fragment, useful for treating malignant disorders such as myeloid
PT malignancies, autoimmune disorders and myeloproliferative disorders -
XX
PS Claim 9; Page 77; 110pp; English.
XX
CC The invention comprises the amino acid and coding sequences of modulator
CC of antigen receptor signalling (MARS) proteins. The MARS protein is a
CC putative tumour suppressor gene and exhibits structural and sequence
CC similarity to the Scr-like adaptor protein (SLAP). The MARS DNA and
CC protein sequences of the invention are useful for the treatment of
CC myeloid malignancies (e.g. acute myelogenous leukaemia) autoimmune
CC disorders, immunosuppression, myeloproliferative disorders and
CC malignancies related to the de-regulation of tyrosine kinases (e.g.
CC breast cancer). The present cDNA sequence encodes a mouse MARS protein.
XX
SQ Sequence 737 BP; 152 A; 219 C; 218 G; 148 T; 0 other;

Query Match 100.0%; Score 168; DB 24; Length 737;
Best Local Similarity 100.0%; Pred. No. 2.4e-40;
Matches 168; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy       1 GCCACAGCCGTGGCCCTGGGCAGTTTCCCGGCAGGTGGCCCGGCCGAGCTGTCGCTGAGA 60
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Db     103 GCCACAGCCGTGGCCCTGGGCAGTTTCCCGGCAGGTGGCCCGGCCGAGCTGTCGCTGAGA 162

Qy      61 CTCGGGGAGCCATTGACCATCGTCTCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAA 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     163 CTCGGGGAGCCATTGACCATCGTCTCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAA 222

Qy     121 GTCTCAGGCAGAGAGTATAACATCCCCAGCGTCCACGTGGCCAAAGTC 168
          ||||||||||||||||||||||||||||||||||||||||||||||||
Db     223 GTCTCAGGCAGAGAGTATAACATCCCCAGCGTCCACGTGGCCAAAGTC 270
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RESULT 2
AAL44089
ID AAL44089 standard; cDNA; 786 BP.
XX
AC AAL44089;
XX
DT 03-OCT-2002 (first entry)
XX
DE Human modulator of antigen receptor signalling protein coding sequence.
XX
KW Human; gene; ss; gene therapy; modulator of antigen receptor signalling;
KW MARS; tumour suppressor gene; Scr-like adaptor protein; SLAP;
KW myeloid malignancy; acute myelogenous leukaemia; autoimmune disorder;
KW immunosuppression; myeloproliferative disorder; breast cancer.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 1..786
FT /*tag= a
FT /product= "Human MARS protein"
XX
PN WO200242452-A2.
XX
PD 30-MAY-2002.
XX
PF 26-NOV-2001; 2001WO-CA01662.
XX
PR 27-NOV-2000; 2000CA-2324663.
XX
PA (HOSP-) HOSPITAL FOR SICK CHILDREN.
XX
PI Mcglade JC, Loreto MP;
XX
DR WPI; 2002-566564/60.
DR P-PSDB; AAO15457.
XX
PT New isolated modulator of antigen receptor signaling protein or its
PT fragment, useful for treating malignant disorders such as myeloid
PT malignancies, autoimmune disorders and myeloproliferative disorders -
XX
PS Claim 12; Page 75; 110pp; English.
XX
CC The invention comprises the amino acid and coding sequences of modulator
CC of antigen receptor signalling (MARS) proteins. The MARS protein is a
CC putative tumour suppressor gene and exhibits structural and sequence
CC similarity to the Scr-like adaptor protein (SLAP). The MARS DNA and
CC protein sequences of the invention are useful for the treatment of
CC myeloid malignancies (e.g. acute myelogenous leukaemia) autoimmune
CC disorders, immunosuppression, myeloproliferative disorders and
CC malignancies related to the de-regulation of tyrosine kinases (e.g.
CC breast cancer). The present cDNA sequence encodes a human MARS protein.
XX
SQ Sequence 786 BP; 162 A; 234 C; 231 G; 159 T; 0 other;

Query Match 100.0%; Score 168; DB 24; Length 786;
Best Local Similarity 100.0%; Pred. No. 2.4e-40;
Matches 168; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy       1 GCCACAGCCGTGGCCCTGGGCAGTTTCCCGGCAGGTGGCCCGGCCGAGCTGTCGCTGAGA 60
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Db     163 CTCGGGGAGCCATTGACCATCGTCTCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAA 222

Qy     121 GTCTCAGGCAGAGAGTATAACATCCCCAGCGTCCACGTGGCCAAAGTC 168
          ||||||||||||||||||||||||||||||||||||||||||||||||
Db     223 GTCTCAGGCAGAGAGTATAACATCCCCAGCGTCCACGTGGCCAAAGTC 270
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RESULT 3
AAS74750
ID AAS74750 standard; cDNA; 2049 BP.
XX
AC AAS74750;
XX
DT 13-FEB-2002 (first entry)
XX
DE DNA encoding novel human diagnostic protein #10554.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US08631.
XX
PR 31-MAR-2000; 2000US-0540217.
PR 23-AUG-2000; 2000US-0649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR P-PSDB; ABG10563.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess

PT biodiversity -
XX
PS Claim 1; SEQ ID No 10554; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and
CC polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC and gene mapping, and in recombinant production of (II). The
CC polynucleotides are also used in diagnostics as expressed sequence tags
CC for identifying expressed genes. (I) is useful in gene therapy techniques
CC to restore normal activity of (II) or to treat disease states involving
CC (II). (II) is useful for generating antibodies against it, detecting or
CC quantitating a polypeptide in tissue, as molecular weight markers and as
CC a food supplement. (II) and its binding partners are useful in medical
CC imaging of sites expressing (II). (I) and (II) are useful for treating
CC disorders involving aberrant protein expression or biological activity.
CC The polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. AAS64197-AAS94564 represent novel human
CC diagnostic coding sequences of the invention.
CC Note: The sequence data for this patent did not appear in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 2049 BP; 479 A; 573 C; 551 G; 443 T; 3 other;

Query Match 100.0%; Score 168; DB 23; Length 2049;
Best Local Similarity 100.0%; Pred. No. 3e-40;
Matches 168; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GCCACAGCCGTGGCCCTGGGCAGTTTCCCGGCAGGTGGCCCGGCCGAGCTGTCGCTGAGA 60
Db 1067 GCCACAGCCGTGGCCCTGGGCAGTTTCCCGGCAGGTGGCCCGGCCGAGCTGTCGCTGAGA 1126

Qy 61 CTCGGGGAGCCATTGACCATCGTCTCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAA 120
Db 1127 CTCGGGGAGCCATTGACCATCGTCTCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAA 1186

Qy 121 GTCTCAGGCAGAGAGTATAACATCCCCAGCGTCCACGTGGCCAAAGTC 168
Db 1187 GTCTCAGGCAGAGAGTATAACATCCCCAGCGTCCACGTGGCCAAAGTC 1234

RESULT 4
AAC77202
ID AAC77202 standard; cDNA; 837 BP.
XX
AC AAC77202;
XX
DT 08-FEB-2001 (first entry)
XX
DE Human ORFX ORF2757 polynucleotide sequence SEQ ID NO:5513.
XX
KW Human; open reading frame; ORFX; detection; cytostatic; hepatotropic;
KW vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective;
KW anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant;
KW immunostimulant; thrombolytic; coagulant; vasotropic; antidiabetic;
KW hypotensive; dermatological; immunosuppressive; antiinflammatory;
KW antiviral; antibacterial; antifungal; antirheumatic; antithyroid;
KW antianaemic; gene therapy; cancer; proliferative disorder; hypertension;
KW neurodegenerative disorder; osteoarthritis; graft vs host disease;
KW cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS;
KW cholesterol ester storage; systemic lupus erythematosus; infection;
KW severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
KW allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
KW bone damage; cartilage damage; antiinflammatory disease; coagulation;
KW thrombosis; contraceptive; ss.
XX
OS Homo sapiens.
XX
PN WO200058473-A2.
XX
PD 05-OCT-2000.
XX
PF 31-MAR-2000; 2000WO-US08621.
XX
PR 31-MAR-1999; 99US-0127607.
PR 02-APR-1999; 99US-0127636.
PR 05-APR-1999; 99US-0127728.
PR 30-MAR-2000; 2000US-0540763.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Shimkets RA, Leach M;
XX
DR WPI; 2000-602362/57.
DR P-PSDB; AAB42993.
XX
PT Novel nucleic acids and peptides derived from open reading frame X,
PT useful for treating e.g. cancers, proliferative disorders,
PT neurodegenerative disorders and cardiovascular disease -
XX
PS Claim 5; Page 4692-4693; 5507pp; English.
XX
CC AAC74446 to AAC77606 encode the proteins given in AAB40237 to AAB43397,
CC which represent the human ORFX open reading frames 1 to 3161. The ORFX
CC sequences have activities such as: cytostatic; hepatotropic; vulnerary;
CC antipsoriatic; antiparkinsonian; nootropic; neuroprotective;
CC osteopathic; anticonvulsant; antiarthritic; immunosuppressant;
CC immunostimulant; cardiant; thrombolytic; coagulant; vasotropic;
CC antidiabetic; hypotensive; dermatological; immunosuppressive;
CC antiinflammatory; antibacterial; antiviral; antifungal; antirheumatic;
CC antithyroid; and antianaemic. The sequences can be used for determining
CC the presence of or predisposition to, or preventing or treating
CC pathological conditions associated with an ORFX-associated disorder. The
CC nucleic acids can be used to express ORFX proteins in gene therapy
CC vectors. The proteins and nucleic acids may be used to treat cancers,
CC proliferative disorders, neurodegenerative disorders, osteoarthritis,
CC graft vs host disease, cardiovascular disease, diabetes mellitus,
CC hypertension, hypothyroidism, cholesterol ester storage, systemic lupus
CC erythematosus, severe combined immunodeficiency (SCID), AIDS, viral,
CC bacterial or fungal infection, malaria, autoimmune disorders, asthma,
CC allergies, aplastic anaemia, burns, wounds, bone and cartilage damage,
CC nocturnal haemoglobinuria, antiinflammatory disease; to enhance
CC coagulation; to inhibit thrombosis; and as a contraceptive.
XX
SQ Sequence 837 8P; 176 A; 254 C; 245 G; 160 T; 2 other;

Query Match 99.0%; Score 166.4; DB 21; Length 837;
Best Local Similarity 99.4%; Pred. No. 7.3e-40;
Matches 167; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GCCACAGCCGTGGCCCTGGGCAGTTTCCCGGCAGGTGGCCCGGCCGAGCTGTCGCTGAGA 60
Db 64 GCCACAGCCGCGGCCCTGGGCAGTTTCCCGGCAGGTGGCCCGGCCGAGCTGTCGCTGAGA 123

Qy 61 CTCGGGGAGCCATTGACCATCGTCTCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAA 120
Db 124 CTCGGGGAGCCATTGACCATCGTCTCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAA 183

Qy 121 GTCTCAGGCAGAGAGTATAACATCCCCAGCGTCCACGTGGCCAAAGTC 168
Db 184 GTCTCAGGCAGAGAGTATAACATCCCCAGCGTCCACGTGGCCAAAGTC 231

RESULT 5
ABK61465
ID A8K61465 standard; cDNA; 1183 BP.
XX
AC ABK61465;
XX
DT 18-JUN-2002 (first entry)
XX
DE Human cDNA encoding protein NOV13.

```
XX
KW   Human; gene; ss; NOVX; gene therapy; cardiomyopathy; atherosclerosis;
KW   cell signal processing disorder; metabolic pathway modulation disorder;
KW   diabetes; cancer; adenocarcinoma; lymphoma; prostate cancer;
KW   uterus cancer; immune response; graft-versus-host disease;
KW   acquired immunodeficiency syndrome; AIDS; asthma; Crohn's disease;
KW   hypertension; congenital heart defects; multiple sclerosis; inflammation;
KW   Albright hereditary osteodystrophy.
XX
OS   Homo sapiens.
XX
PN   WO200216599-A2.
XX
PD   28-FEB-2002.
XX
PF   27-AUG-2001; 2001WO-US26510.
XX
PR   25-AUG-2000; 2000US-228191P.
PR   08-FEB-2001; 2001US-267300P.
PR   20-FEB-2001; 2001US-269961P.
PR   20-MAR-2001; 2001US-277337P.
XX
PA   (CURA-) CURAGEN CORP.
PA   (CORT-) COR THERAPEUTICS INC.
XX
PI   Burgess CE, Conley PB, Grosse WM, Hart M, Kekuda R, Shimkets RA;
PI   Spytek KA, Szekeres ES, Tomlinson JE, Topper JN, Yang R;
XX
DR   WPI; 2002-280937/32.
DR   P-PSDB; AAU91308.
XX
PT   New polypeptides for treating or preventing a disorder associated with
PT   them, in humans, e.g. cardiomyopathy, atherosclerosis or cancers -
XX
PS   Claim 1; Page 98; 263pp; English.
XX
CC   The invention relates to an isolated polypeptide (NOVX) a mature
CC   form of NOVX, a NOVX variant (differing by no more than 15%), the
CC   nucleotide encoding NOVX (or its complement, fragment or variant).
CC   NOVX is NOV1-14, 15a, 15b, 16a, and 16b. The NOVX polypeptide, nucleic
CC   acid encoding it and antibody against it, are useful for treating or
CC   preventing (e.g. by gene therapy) a NOVX-associated disorder in humans,
CC   e.g. cardiomyopathy, atherosclerosis, a disorder related to cell signal
CC   processing and metabolic pathway modulation, diabetes or cancers. The
CC   NOVX polypeptide and nucleic acids are also useful for determining the
CC   presence of predisposition to the diseases. The NOVX nucleic acid and
CC   polypeptide are especially useful in therapeutic or prophylactic
CC   applications for disorders associated with aberrant NOVX expression or
CC   activity, e.g. cancers (e.g. adenocarcinoma, lymphoma, prostate cancer or
CC   uterus cancer), immune response, graft-versus-host disease, acquired
CC   immunodeficiency syndrome (AIDS), asthma, Crohn's disease, hypertension,
CC   congenital heart defects, multiple sclerosis, inflammation or Albright
CC   hereditary osteodystrophy and many other diseases listed in the
CC   specification. The DNA encoding the protein is useful in gene therapy
CC   for treating the conditions. This is also useful in detection assays,
CC   chromosome mapping, tissue typing, diagnostic or prognostic assays, or
CC   for developing a powerful assay system for functional analysis of
CC   various human disorders, as well as in diagnostic applications. The
CC   present sequence encodes a NOVX protein.
XX
SQ   Sequence 1183 BP; 251 A; 359 C; 333 G; 240 T; 0 other;

  Query Match             99.0%;  Score 166.4;  DB 24;  Length 1183;
  Best Local Similarity   99.4%;  Pred. No. 7.8e-40;
  Matches  167;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

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Qy      61 CTCGGGGAGCCATTGACCATCGTCTCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAA 120
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Qy     121 GTCTCAGGCAGAGAGTATAACATCCCCAGCGTCCACGTGGCCAAAGTC 168
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Db     620 GTCTCAGGCAGAGAGTATAACATCCCCAGCGTCCACGTGGGCAAAGTC 667


RESULT 6
AAL44087
ID   AAL44087 standard; cDNA; 1348 BP.
XX
AC   AAL44087;
XX
DT   03-OCT-2002  (first entry)
XX
DE   Mouse modulator of antigen receptor signalling protein coding sequence.
XX
KW   Mouse; gene; ss; gene therapy; modulator of antigen receptor signalling;
KW   MARS; tumour suppressor gene; Scr-like adaptor protein; SLAP;
KW   myeloid malignancy; acute myelogenous leukaemia; autoimmune disorder;
KW   immunosuppression; myeloproliferative disorder; breast cancer.
XX
OS   Mus sp.
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FH   Key             Location/Qualifiers
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XX
PN   WO200242452-A2.
XX
PD   30-MAY-2002.
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PF   26-NOV-2001; 2001WO-CA01662.
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PR   27-NOV-2000; 2000CA-2324663.
XX
PA   (HOSP-) HOSPITAL FOR SICK CHILDREN.
XX
PI   Mcglade JC, Loreto MP;
XX
DR   WPI; 2002-566564/60.
DR   P-PSDB; AAO15456.
XX
PT   New isolated modulator of antigen receptor signaling protein or its
PT   fragment, useful for treating malignant disorders such as myeloid
PT   malignancies, autoimmune disorders and myeloproliferative disorders -
XX
PS   Claim 10; Fig 1A; 110pp; English.
XX
CC   The invention comprises the amino acid and coding sequences of modulator
CC   of antigen receptor signalling (MARS) proteins. The MARS protein is a
CC   putative tumour suppressor gene and exhibits structural and sequence
CC   similarity to the Scr-like adaptor protein (SLAP). The MARS DNA and
CC   protein sequences of the invention are useful for the treatment of
CC   myeloid malignancies (e.g. acute myelogenous leukaemia) autoimmune
CC   disorders, immunosuppression, myeloproliferative disorders and
CC   malignancies related to the de-regulation of tyrosine kinases (e.g.
CC   breast cancer). The present cDNA sequence encodes a mouse MARS protein.
XX
SQ   Sequence 1348 BP; 324 A; 385 C; 362 G; 277 T; 0 other;

  Query Match             74.3%;  Score 124.8;  DB 24;  Length 1348;
  Best Local Similarity   83.9%;  Pred. No. 1.7e-27;
  Matches  141;  Conservative    0;  Mismatches   27;  Indels    0;  Gaps    0;

Qy       1 GCCACAGCCGTGGCCCTGGGCAGTTTCCCGGCAGGTGGCCCGGCCGAGCTGTCGCTGAGA 60
           | |||||| ||||||||||||||||||||| |||||||  | ||||   || || ||||||
Db     381 GTCACAGCTGTGGCCCTGGGCAGTTTCCCAGCAGGTGAACAGGCCAGACTATCTCTGAGA 440

Qy      61 CTCGGGGAGCCATTGACCATCGTCTCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAA 120
           ||||||||||  |||||||| ||||||||||||||||| |||||||| || | ||| |||
Db     441 CTCGGGGAGCCGCTGACCATCATCTCTGAGGATGGAGATTGGTGGACAGTCCAGTCGGAA 500
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Qy    121 GTCTCAGGCAGAGAGTATAACATCCCCAGCGTCCACGTGGCCAAAGTC 168
          ||||||||||||||||||  |||| ||||| ||  | ||||| ||||||
Db    501 GTCTCAGGCAGAGAGTACCACATGCCCAGTGTGTATGTGGCTAAAGTC 548


RESULT 7
AAS70181
ID   AAS70181 standard; cDNA; 211 BP.
XX
AC   AAS70181;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #5985.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US08631.
XX
PR   31-MAR-2000; 2000US-0540217.
PR   23-AUG-2000; 2000US-0649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG05994.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity  -
XX
PS   Claim 1; SEQ ID No 5985; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and
CC   polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC   polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC   and gene mapping, and in recombinant production of (II). The
CC   polynucleotides are also used in diagnostics as expressed sequence tags
CC   for identifying expressed genes. (I) is useful in gene therapy techniques
CC   to restore normal activity of (II) or to treat disease states involving
CC   (II). (II) is useful for generating antibodies against it, detecting or
CC   quantitating a polypeptide in tissue, as molecular weight markers and as
CC   a food supplement. (II) and its binding partners are useful in medical
CC   imaging of sites expressing (II). (I) and (II) are useful for treating
CC   disorders involving aberrant protein expression or biological activity.
CC   The polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human
CC   diagnostic coding sequences of the invention.
CC   Note: The sequence data for this patent did not appear in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 211 BP; 50 A; 51 C; 72 G; 38 T; 0 other;

  Query Match           48.1%;  Score 80.8;  DB 23;  Length 211;
  Best Local Similarity  97.6%;  Pred. No. 1.3e-14;
  Matches   82;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy     85 TCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAAGTCTCAGGCAGAGAGTATAACATC 144
          ||  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     16 TCCAAGGATGGAGACTGGTGGACGGTGCTGTCTGAAGTCTCAGGCAGAGAGTATAACATC 75

Qy    145 CCCAGCGTCCACGTGGCCAAAGTC 168
          |||||||||||||||||||||||||
Db     76 CCCAGCGTCCACGTGGCCAAAGTC 99


RESULT 8
ABK83935
ID   ABK83935 standard; cDNA; 2298 BP.
XX
AC   ABK83935;
XX
DT   14-AUG-2002  (first entry)
XX
DE   Human cDNA differentially expressed in granulocytic cells #506.
XX
KW   Human; ss; granulocytic cell; DNA chip; bacterial infection;
KW   viral infection; parasitic infection; protozoal infection;
KW   fungal infection; sterile inflammatory disease; psoriasis;
KW   rheumatoid arthritis; glomerulonephritis; asthma; thrombosis;
KW   cardiac reperfusion injury; renal reperfusion injury; ARDS;
KW   adult respiratory distress syndrome; inflammatory bowel disease;
KW   Crohn's disease; ulcerative colitis; periodontal disease;
KW   granulocyte activation; chronic inflammation; allergy.
XX
OS   Homo sapiens.
XX
PN   WO200228999-A2.
XX
PD   11-APR-2002.
XX
PF   03-OCT-2001; 2001WO-US30821.
XX
PR   03-OCT-2000; 2000US-237189P.
XX
PA   (GENE-) GENE LOGIC INC.
XX
PI   Beazer-Barclay Y,  Weissman SM,  Yamaga S,  Vockley J;
XX
DR   WPI; 2002-435328/46.
XX
PT   Detecting granulocyte activation by detecting differential expression
PT   of genes associated with granulocyte activation, which serves as
PT   diagnostic markers that is useful for monitoring disease states and
PT   drug toxicity  -
XX
PS   Claim 1; SEQ ID No 506; 114pp; English.
XX
CC   The invention relates to detecting (M1) granulocyte (GC) activation
CC   (GCA), by detecting the level of expression of gene(s) (Gs) identified by
CC   DNA chip analysis as given in the specification, and comparing
CC   the expression level to an expression level in an unactivated
CC   GC, where differential expression of Gs is indicative of GCA.
CC   Also included are modulating (M2) GA by contacting GC with an agent
CC   that alters the expression of at least one gene in Gs; (2) screening (M3)
CC   for an agent capable of modulating GCA or an inflammation (especially
CC   chronic) in a tissue, an allergic response in a subject, exposure of a
CC   subject to a pathogen or sterile inflammatory disease using the
CC   gene expression profile; (3) detecting (M4) an inflammation (especially
CC   chronic) in a tissue, an allergic response in a subject, exposure of a
CC   subject to a pathogen or sterile inflammatory disease, by detecting the
CC   level of expression in a sample of the tissue of gene(s) from Gs, where
CC   the level of expression of the gene is indicative of inflammation;
CC   (4) treating (M5) an inflammation (especially chronic) or in a tissue,
CC   an allergic response in a subject, exposure of a subject to a pathogen
CC   or sterile inflammatory disease, by contacting a tissue having
CC   inflammation with an agent that modulates the expression of gene(s)
CC   from Gs in the tissue. M1 is useful for detecting GCA; M2 is useful for
CC   modulating GA; M3 is useful for screening an agent capable of modulating
CC   GCA preferably in an inflammation in a tissue; M4 is useful for
CC   detecting an inflammation (especially chronic) in a tissue, an allergic
CC   response in a subject, exposure of a subject to a pathogen or sterile
```

CC inflammatory disease (e.g. psoriasis, rheumatoid arthritis,
CC glomerulonephritis, asthma, thrombosis, cardiac reperfusion injury, renal
CC reperfusion injury, ARDS, adult respiratory distress syndrome,
CC inflammatory bowel disease, Crohn's disease, ulcerative colitis,
CC periodontal disease; also bacterial infection, viral infection,
CC parasitic infection, protozoal infection, fungal infection and M5 is
CC useful for treating one of the above conditions. The present
CC sequence represents a gene differentially expressed in granulocytes.
CC Note: The sequence data for this patent did not form part
CC of the printed specification, but was obtained in electronic
CC format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 2298 BP; 645 A; 564 C; 576 G; 513 T; 0 other;

Query Match 26.0%; Score 43.6; DB 24; Length 2298;
Best Local Similarity 58.5%; Pred. No. 0.0023;
Matches 76; Conservative 0; Mismatches 54; Indels 0; Gaps 0;

Qy 39 CCCGGCCGAGCTGTCGCTGAGACTCGGGGAGCCATTGACCATCGTCTCTGAGGATGGAGA 98
Db 531 CCCGGACGACTTGTCTTTCAAGAAAGGAGAGAAGATGAAAGTCCTGGAGGAGCATGGAGA 590

Qy 99 CTGGTGGACGGTGCTGTCTGAAGTCTCAGGCAGAGAGTATAACATCCCCAGCGTCCACGT 158
Db 591 ATGGTGGAAAGCAAAGTCCCTTTTAACAAAAAAAGAAGGCTTCATCCCCAGCAACTATGT 650

Qy 159 GGCCAAAGTC 168
Db 651 GGCCAAACTC 660

RESULT 9
AAS02049
ID AAS02049 standard; cDNA; 2109 BP.
XX
AC AAS02049;
XX
DT 16-JUL-2001 (first entry)
XX
DE DNA encoding molecule for disease detection and treatment, mddt14.
XX
KW Human; mddt14; gene therapy; adenosine deaminase deficiency;
KW ADA; severe combined immunodeficiency syndrome; cystic fibrosis;
KW thalassaemia; familial hypercholesterolaemia; haemophilia; factor VIII;
KW factor IX; cancer; cell proliferation; parasite; human retrovirus; HIV;
KW hepatitis B; hepatitis C; Candida albicans; Plasmodinium falciparum;
KW Paracoccidioides brasiliensis; Trypanosoma brasiliensis; ss.
XX
OS Homo sapiens.
XX
PN WO200123538-A2.
XX
PD 05-APR-2001.
XX
PF 22-SEP-2000; 2000WO-US26085.
XX
PR 28-SEP-1999; 99US-0156565.
PR 30-NOV-1999; 99US-0168197.
XX
PA (INCY-) INCYTE GENOMICS INC.
XX
PI Hodgson DM, Lincoln SE, Russo FD, Spiro PA, Banville SC;
PI Bratcher SR, Dufour GE, Cohen HJ, Rosen BH, Shah P, Chalup MS;
PI Hillman JL, Jones AL, Yu JY, Greenawalt LB, Panzer SR;
PI Roseberry AM, Wright RJ, Chen W, Liu TF, Yap PE, Stockdreher TK;
PI Amshey S, Fong WT;
XX
DR WPI; 2001-258131/26.
XX
PT Purified disease treatment and detection molecule polynucleotides and
PT polypeptides, useful for providing diagnostic assays and gene therapy -
XX
PS Claim 1; Page 103-104; 113pp; English.
XX
CC The sequence represents the coding sequence of molecule for disease
CC detection and treatment, mddt14, shown by computer analysis to be similar
CC to Src homology domain family of proteins. The sequence may be used for
CC somatic or germline gene therapy. Gene therapy may be performed to: (i)
CC correct genetic deficiency such as in severe combined immunodeficiency
CC syndrome associated with adenosine deaminase (ADA) deficiency, cystic
CC fibrosis, thalassaemias, familial hypercholesterolaemia and haemophilia
CC caused by factor VIII or factor IX deficiencies; (ii) express a
CC conditional lethal gene product (such as in the case of cancers which
CC result from unregulated cell proliferation); (iii) express a protein
CC which affords protection against intracellular parasites (for example,
CC human retroviruses such as HIV, hepatitis B or C, fungal parasites such
CC as Candida albicans and Paracoccidioides brasiliensis, and protozoal
CC parasites such as Plasmodinium falciparum and Trypanosoma brasiliensis.
XX
SQ Sequence 2109 BP; 545 A; 538 C; 562 G; 464 T; 0 other;

Query Match 23.2%; Score 39; DB 22; Length 2109;
Best Local Similarity 54.5%; Pred. No. 0.053;
Matches 78; Conservative 0; Mismatches 65; Indels 0; Gaps 0;

Qy 25 TTCCCGGCAGGTGGCCCGGCCGAGCTGTCGCTGAGACTCGGGGAGCCATTGACCATCGTC 84
Db 504 TACCCGTCTCCTGACATCAGCCCCCCGATATTCCGCCGAGGGGAGAAACTGCGTGTGATT 563

Qy 85 TCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAAGTCTCAGGCAGAGAGTATAACATC 144
Db 564 TCTGATGAAGGGGGCTGGTGGAAAGCTATTTCTCTTAGCACTGGTCGAGAGAGTTACATC 623

Qy 145 CCCAGCGTCCACGTGGCCAAAGT 167
Db 624 CCTGGAATATGTGTGGCCAGAGT 646

RESULT 10
ABK83738
ID ABK83738 standard; cDNA; 2665 BP.
XX
AC ABK83738;
XX
DT 14-AUG-2002 (first entry)
XX
DE Human cDNA differentially expressed in granulocytic cells #309.
XX
KW Human; ss; granulocytic cell; DNA chip; bacterial infection;
KW viral infection; parasitic infection; protozoal infection;
KW fungal infection; sterile inflammatory disease; psoriasis;
KW rheumatoid arthritis; glomerulonephritis; asthma; thrombosis;
KW cardiac reperfusion injury; renal reperfusion injury; ARDS;
KW adult respiratory distress syndrome; inflammatory bowel disease;
KW Crohn's disease; ulcerative colitis; periodontal disease;
KW granulocyte activation; chronic inflammation; allergy.
XX
OS Homo sapiens.
XX
PN WO200228999-A2.
XX
PD 11-APR-2002.
XX
PF 03-OCT-2001; 2001WO-US30821.
XX
PR 03-OCT-2000; 2000US-237189P.
XX
PA (GENE-) GENE LOGIC INC.
XX
PI Beazer-Barclay Y, Weissman SM, Yamaga S, Vockley J;
XX
DR WPI; 2002-435328/46.
XX
PT Detecting granulocyte activation by detecting differential expression
PT of genes associated with granulocyte activation, which serves as

PT diagnostic markers that is useful for monitoring disease states and
PT drug toxicity -
XX
PS Claim 1; SEQ ID No 309; 114pp; English.
XX
CC The invention relates to detecting (M1) granulocyte (GC) activation
CC (GCA), by detecting the level of expression of gene(s) (Gs) identified by
CC DNA chip analysis as given in the specification, and comparing
CC the expression level to an expression level in an unactivated
CC GC, where differential expression of Gs is indicative of GCA.
CC Also included are modulating (M2) GA by contacting GC with an agent
CC that alters the expression of at least one gene in Gs; (2) screening (M3)
CC for an agent capable of modulating GCA or an inflammation (especially
CC chronic) in a tissue, an allergic response in a subject, exposure of a
CC subject to a pathogen or sterile inflammatory disease using the
CC gene expression profile; (3) detecting (M4) an inflammation (especially
CC chronic) in a tissue, an allergic response in a subject, exposure of a
CC subject to a pathogen or sterile inflammatory disease, by detecting the
CC level of expression in a sample of the tissue of gene(s) from Gs, where
CC the level of expression of the gene is indicative of inflammation;
CC (4) treating (M5) an inflammation (especially chronic) or in a tissue,
CC an allergic response in a subject, exposure of a subject to a pathogen
CC or sterile inflammatory disease, by contacting a tissue having
CC inflammation with an agent that modulates the expression of gene(s)
CC from Gs in the tissue. M1 is useful for detecting GCA; M2 is useful for
CC modulating GA; M3 is useful for screening an agent capable of modulating
CC GCA preferably in an inflammation in a tissue; M4 is useful for
CC detecting an inflammation (especially chronic) in a tissue, an allergic
CC response in a subject, exposure of a subject to a pathogen or sterile
CC inflammatory disease (e.g. psoriasis, rheumatoid arthritis,
CC glomerulonephritis, asthma, thrombosis, cardiac reperfusion injury, renal
CC reperfusion injury, ARDS, adult respiratory distress syndrome,
CC inflammatory bowel disease, Crohn's disease, ulcerative colitis,
CC periodontal disease; also bacterial infection, viral infection,
CC parasitic infection, protozoal infection, fungal infection and M5 is
CC useful for treating one of the above conditions. The present
CC sequence represents a gene differentially expressed in granulocytes.
CC Note: The sequence data for this patent did not form part
CC of the printed specification, but was obtained in electronic
CC format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 2665 BP; 736 A; 617 C; 689 G; 623 T; 0 other;

Query Match 23.2%; Score 39; DB 24; Length 2665;
Best Local Similarity 54.5%; Pred. No. 0.055;
Matches 78; Conservative 0; Mismatches 65; Indels 0; Gaps 0;

```
Qy      25 TTCCCGGCAGGTGGCCCGGCCGAGCTGTCGCTGAGACTCGGGGAGCCATTGACCATCGTC 84
           | |||| |   || |     |   | |    | | ||||||  | ||    | |
Db     138 TACCCGTCTCCTGACATCAGCCCCCCGATATTCCGCCGAGGGGAGAAACTGCGTGTGATT 197

Qy      85 TCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAAGTCTCAGGCAGAGAGTATAACATC 144
           ||||| || || | |||||||||  |   | |||     | | ||  |||||  | ||||||
Db     198 TCTGATGAAGGGGGCTGGTGGAAAGCTATTTCTCTTAGCACTGGTCGAGAGAGTTACATC 257

Qy     145 CCCAGCGTCCACGTGGCCAAAGT 167
           ||  |  |    |||||| |||
Db     258 CCTGGAATATGTGTGGCCAGAGT 280
```

RESULT 11
ABL65189
ID ABL65189 standard; DNA; 2665 BP.
XX
AC ABL65189;
XX
DT 15-MAY-2002 (first entry)
XX
DE Lung cancer related gene sequence SEQ ID NO:3526.
XX
KW Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW gene; ds.
XX
OS Homo sapiens.
XX
PN WO200194629-A2.
XX
PD 13-DEC-2001.
XX
PF 30-MAY-2001; 2001WO-US10838.
XX
PR 05-JUN-2000; 2000US-209473P.
PR 05-JUN-2000; 2000US-209531P.
PR 18-SEP-2000; 2000US-233133P.
PR 18-SEP-2000; 2000US-233617P.
PR 20-SEP-2000; 2000US-234009P.
PR 20-SEP-2000; 2000US-234034P.
PR 20-SEP-2000; 2000US-234052P.
PR 22-SEP-2000; 2000US-234509P.
PR 22-SEP-2000; 2000US-234567P.
PR 25-SEP-2000; 2000US-234923P.
PR 25-SEP-2000; 2000US-234924P.
PR 25-SEP-2000; 2000US-235077P.
PR 25-SEP-2000; 2000US-235082P.
PR 25-SEP-2000; 2000US-235134P.
PR 25-SEP-2000; 2000US-235280P.
PR 26-SEP-2000; 2000US-235637P.
PR 26-SEP-2000; 2000US-235638P.
PR 27-SEP-2000; 2000US-235711P.
PR 27-SEP-2000; 2000US-235720P.
PR 27-SEP-2000; 2000US-235840P.
PR 27-SEP-2000; 2000US-235863P.
PR 28-SEP-2000; 2000US-236028P.
PR 28-SEP-2000; 2000US-236032P.
PR 28-SEP-2000; 2000US-236033P.
PR 28-SEP-2000; 2000US-236034P.
PR 28-SEP-2000; 2000US-236109P.
PR 28-SEP-2000; 2000US-236111P.
PR 29-SEP-2000; 2000US-236842P.
PR 29-SEP-2000; 2000US-236891P.
PR 02-OCT-2000; 2000US-237172P.
PR 02-OCT-2000; 2000US-237173P.
PR 02-OCT-2000; 2000US-237278P.
PR 02-OCT-2000; 2000US-237294P.
PR 02-OCT-2000; 2000US-237295P.
PR 02-OCT-2000; 2000US-237316P.
PR 03-OCT-2000; 2000US-237425P.
PR 03-OCT-2000; 2000US-237598P.
PR 03-OCT-2000; 2000US-237604P.
PR 03-OCT-2000; 2000US-237606P.
PR 03-OCT-2000; 2000US-237608P.
PR 01-NOV-2000; 2000US-244867P.
PR 01-NOV-2000; 2000US-245084P.
XX
PA (AVAL-) AVALON PHARM.
XX
PI Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S;
PI Soppet DR, Weaver Z;
XX
DR WPI; 2002-188264/24.
XX
PT Screening for anti-neoplastic agent involves exposing cells to a
PT chemical agent to be tested for anti-neoplastic activity, and
PT determining a change in expression of a gene of a signature gene set -
XX
PS Claim 1; SEQ ID 3526; 44pp; English.
XX
CC The present invention describes a method (M1) for screening for an
CC anti-neoplastic agent. The method involves exposing cells to a chemical
CC agent to be tested for anti-neoplastic activity, determining a change in
CC expression of at least one gene (I) of a signature gene set, where (I)
CC comprises a sequence (S) selected from 8447 sequences (given in ABL61664
CC to ABL70110), or is at least 95% identical to (S), where a change in

CC expression is indicative of anti-neoplastic activity. (I) has cytostatic
CC activity and can be used in gene therapy. M1 can be used for screening
CC an anti-neoplastic agent, and can be used for producing a product which
CC is the data collected with respect to the anti-neoplastic agent as a
CC result of M1, and the data is sufficient to convey the chemical
CC structure and/or properties of the agent. M1 can be used in the
CC treatment of cancer such as colon, breast, stomach, lung, thyroid,
CG oesophageal, ovarian, kidney, prostate or pancreatic cancer,
CC adenocarcinoma, carcinoma, clear cell cancer, infiltrating ductal cancer,
CC infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine
CC carcinoma, papillary carcinoma and Wilm's tumour.
XX
SQ Sequence 2665 BP; 736 A; 617 C; 689 G; 623 T; 0 other;

Query Match 23.2%; Score 39; DB 24; Length 2665;
Best Local Similarity 54.5%; Pred. No. 0.055;
Matches 78; Conservative 0; Mismatches 65; Indels 0; Gaps 0;

```
Qy      25 TTCCCGGCAGGTGGCCCGGCCGAGCTGTCGCTGAGACTCGGGGAGCCATTGACCATCGTC 84
           | |||| |   || |     |   | |    | | |  |||||| | ||    | |
Db     138 TACCCGTCTCCTGACATCAGCCCCCCGATATTCCGCCGAGGGGAGAAACTGCGTGTGATT 197

Qy      85 TCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAAGTCTCAGGCAGAGAGTATAACATC 144
           ||||| || || | |||||||||  |   | |||     | | ||  |||||  | |||||
Db     198 TCTGATGAAGGGGGCTGGTGGAAAGCTATTTCTCTTAGCACTGGTCGAGAGAGTTACATC 257

Qy     145 CCCAGCGTCCACGTGGCCAAAGT 167
           ||  |  |   ||||||| |||
Db     258 CCTGGAATATGTGTGGCCAGAGT 280
```

RESULT 12
AAZ46491
ID AAZ46491 standard; DNA; 2032 BP.
XX
AC AAZ46491;
XX
DT 13-MAR-2000 (first entry)
XX
DE PKA substrate, Src-family protein encoding DNA.
XX
KW Protein kinase A; PKA; PKA signaling pathway; phosphorylation; cancer;
KW kinase substrate; immunosuppressive disorder; proliferative disease;
KW HIV infection; AIDS; immunodeficiency; autoimmune disease;
KW systemic lupus erythematosus; Src-family; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 52..1581
FT /*tag= a
XX
PN WO9962315-A2.
XX
PD 02-DEC-1999.
XX
PF 27-MAY-1999; 99WO-GB01680.
XX
PR 27-MAY-1998; 98NO-0002419.
PR 30-DEC-1998; 98US-0114240.
XX
PA (LAUR-) LAURAS AS.
PA (JONE/) JONES E L.
XX
PI Hansson V, Levy FO, Mustelin T, Skalhegg BS, Sundvold V, Tasken K;
PI Vang T, Altman A, Munshi A;
XX
DR WPI; 2000-086801/07.
DR P-PSDB; AAY49420.
XX
PT Altering the activity of protein kinase signaling pathways, used for
PT treating immunosuppressive disorders, e.g. AIDS, proliferative
PT disorders, e.g. cancers or autoimmune diseases -
XX
PS Claim 22; Page 94-95; 111pp; English.
XX
CC The invention provides a novel method of altering the activity of the
CC protein kinase A (PKA) signaling pathway in a cell that comprises
CC altering the extent of phosphorylation of one or more PKA substrates, or
CC kinase substrates downstream in the PKA signaling pathway. Pharmaceutical
CC compositions containing a nucleic acid molecule that encodes a PKA
CC substrate, or fragment, precursor or functionally equivalent variant,
CC where the sequence is modified to alter its susceptibility to
CC phosphorylation by PKA can be used for treating a disorder exhibiting
CC abnormal PKA signaling activity, immunosuppressive disorders or
CC proliferative diseases. They can be used for treating e.g. HIV
CC infection, AIDS, common variable immunodeficiency or cancers. Conditions
CC in which upregulation of the PKA pathway is required, such as autoimmune
CC disease, e.g. systemic lupus erythematosus, may also be treated. The
CC present sequence represents a DNA sequence encoding a PKA substrate,
CC wherein the substrate is in the Src-family, preferably Lck, Fyn, Src,
CC Yes, Fgr, Lyn, Hck Blk, Yrk, c-tkl, Fyk, Src-1 or Src-2.
XX
SQ Sequence 2032 BP; 450 A; 576 C; 584 G; 422 T; 0 other;

Query Match 20.5%; Score 34.4; DB 21; Length 2032;
Best Local Similarity 51.3%; Pred. No. 1.2;
Matches 80; Conservative 0; Mismatches 76; Indels 0; Gaps 0;

```
Qy      11 TGGCCCTGGGCAGTTTCCCGGCAGGTGGCCCGGCCGAGCTGTCGCTGAGACTCGGGGAGC 70
           | || |||  ||| |    | |   |  |   |  || |||    |        |||||  |
Db     251 TCGCTCTGCACAGCTATGAGCCCTCTCACGACGGAGATCTGGGCTTTGAGAAGGGGGAAC 310

Qy      71 CATTGACCATCGTCTCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAAGTCTCAGGCA 130
           || |   |||| |      ||   || || ||||||| || || |||      | | |||
Db     311 CACTCCGCATCCTGGAGCAGAGCGGCGAGTGGTGGAAGGCGCAGTCCCTGACCACGGGCC 370

Qy     131 GAGAGTATAACATCCCCAGCGTCCACGTGGCCAAAG 166
           ||      |||||||  |      ||||||||||
Db     371 AGGAAGGCTTCATCCCCTTCAATTTTGTGGCCAAAG 406
```

RESULT 13
ABA31398/c
ID ABA31398 standard; DNA; 577 BP.
XX
AC ABA31398;
XX
DT 23-JAN-2002 (first entry)
XX
DE Probe #9864 for gene expression analysis in human heart cell sample.
XX
KW Human; gene expression; heart; microarray; vascular system; probe;
KW cardiovascular disease; hypertension; cardiac arrhythmia;
KW congenital heart disease; ss.
XX
OS Homo sapiens.
XX
PN WO200157274-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US00666.
XX
PR 04-FEB-2000; 2000US-0180312.
PR 26-MAY-2000; 2000US-0207456.
PR 30-JUN-2000; 2000US-0608408.
PR 03-AUG-2000; 2000US-0632366.
PR 21-SEP-2000; 2000US-0234687.
PR 27-SEP-2000; 2000US-0236359.
PR 04-OCT-2000; 2000GB-0024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX

```
DR   WPI; 2001-488899/53.
XX
PT   Single exon nucleic acid probes for analyzing gene expression in human
PT   hearts -
XX
PS   Claim 1; SEQ ID No 9864; 530pp; English.
XX
CC   The present invention relates to single exon nucleic acid probes for
CC   measuring human gene expression in a sample derived from human heart. The
CC   present sequence is one such probe. The probes may be used for
CC   predicting, measuring and displaying gene expression in samples derived
CC   from the human heart via microarrays. By measuring gene expression, the
CC   probes are useful for predicting, diagnosing, grading, staging,
CC   monitoring and prognosing diseases of the human heart and vascular system
CC   e.g. cardiovascular disease, hypertension, cardiac arrhythmias and
CC   congenital heart disease.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 577 BP; 105 A; 197 C; 164 G; 111 T; 0 other;

  Query Match             19.6%;  Score 33;  DB 22;  Length 577;
  Best Local Similarity   54.5%;  Pred. No. 2.4;
  Matches   66;  Conservative    0;  Mismatches   55;  Indels    0;  Gaps    0;

Qy      11 TGGCCCTGGGCAGTTTCCCGGCAGGTGGCCCGGCCGAGCTGTCGCTGAGACTCGGGGAGC 70
           || || ||     ||| | | ||||||| | ||| | |  |||   ||||||| ||  |
Db     234 TGACCTTGCTGTCTTTGCGGCCAGGTGGGCAGGCTGTGGGGTCCTCGAGACTCAGGTCGT 175

Qy      71 CATTGACCATCGTCTCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAAGTCTCAGGCA 130
           ||   | ||   |    |||||          || | || |  | |   ||||||| ||
Db     174 CACCCAGCAGGATGGACGAGGACCTGTCTGAGTTCAGGGAGAAGGCCTCCGTCTCAGCCA 115

Qy     131 G 131
           |
Db     114 G 114


RESULT 14
AAI44415/c
ID   AAI44415 standard; DNA; 577 BP.
XX
AC   AAI44415;
XX
DT   17-OCT-2001  (first entry)
XX
DE   Probe #13101 used to measure gene expression in human placenta sample.
XX
KW   Probe; microarray; human; placenta; antenatal diagnosis;
KW   genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157272-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00663.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488897/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human placenta -
XX
PS   Claim 25; SEQ ID No 13101; 654pp; English.
XX
CC   The present invention relates to single exon nucleic acid probes (SENP).
CC   The present sequence is one such probe. The probes are useful for
CC   producing a microarray for predicting, measuring and displaying gene
CC   expression in samples derived from human placenta. The probes are useful
CC   for antenatal diagnosis of human genetic disorders.
XX
SQ   Sequence 577 BP; 105 A; 197 C; 164 G; 111 T; 0 other;

  Query Match             19.6%;  Score 33;  DB 22;  Length 577;
  Best Local Similarity   54.5%;  Pred. No. 2.4;
  Matches   66;  Conservative    0;  Mismatches   55;  Indels    0;  Gaps    0;

Qy      11 TGGCCCTGGGCAGTTTCCCGGCAGGTGGCCCGGCCGAGCTGTCGCTGAGACTCGGGGAGC 70
           || || ||     ||| | | ||||||| | ||| | |  |||   ||||||| ||  |
Db     234 TGACCTTGCTGTCTTTGCGGCCAGGTGGGCAGGCTGTGGGGTCCTCGAGACTCAGGTCGT 175

Qy      71 CATTGACCATCGTCTCTGAGGATGGAGACTGGTGGACGGTGCTGTCTGAAGTCTCAGGCA 130
           ||   | ||   |    |||||          || | || |  | |   ||||||| ||
Db     174 CACCCAGCAGGATGGACGAGGACCTGTCTGAGTTCAGGGAGAAGGCCTCCGTCTCAGCCA 115

Qy     131 G 131
           |
Db     114 G 114


RESULT 15
AAT70377
ID   AAT70377 standard; cDNA; 3311 BP.
XX
AC   AAT70377;
XX
DT   15-DEC-1997  (first entry)
XX
DE   Cytohesin 1.
XX
KW   Cytohesin 1; cytohesin 2; cytohesin PH; T-lymphocyte; wound healing;
KW   immune system; Pleckstrin; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   exon            1..3251
FT                   /*tag=  a
FT   CDS             70..1266
FT                   /*tag=  b
FT   misc_RNA        841..1263
FT                   /*tab=  c
FT                   /note= "DNA contained in cytohesin PH encoding
FT                          sequence, see CC"
XX
PN   EP763597-A2.
XX
PD   19-MAR-1997.
XX
PF   09-SEP-1996;   96EP-0114413.
XX
PR   14-SEP-1995;   95DE-4034120.
XX
PA   (FARH ) HOECHST AG.
XX
PI   Kolanus W,  Schiller B,  Ostner B;
XX
DR   WPI; 1997-167789/16.
DR   P-PSDB; AAW18782.
XX
PT   Cytohesin-2 peptide and use of cytohesin PH peptide - for regulation
PT   of T-lymphocyte activation
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XX
PS Disclosure; Page 19-20; 30pp; German.
XX
CC The cytohesin 2 peptide (AAW18783) can be used for regulation
CC of T-lymphocyte activation. Cytohesin 2 and cytohesin PH peptides
CC can be used to modulate inflammation, promote wound healing,
CC suppress the immune system, esp. during organ transplantation,
CC inhibit metastasis of haematopoietic tumours and treat
CC arteriosclerosis. Cytohesin PH peptides comprise at least part
CC of the cytohesin 1 sequence, esp. amino acids 258-398 (AAT70377).
CC The PH peptides are Pleckstrin homology domains found in several
CC proteins.
XX
SQ Sequence 3311 BP; 784 A; 820 C; 953 G; 754 T; 0 other;

Query Match 19.6%; Score 33; DB 18; Length 3311;
Best Local Similarity 52.6%; Pred. No. 3.5;
Matches 72; Conservative 0; Mismatches 65; Indels 0; Gaps 0;

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Qy      30 GGCAGGTGGCCCGGCCGAGCTGTCGCTGAGACTCGGGGAGCCATTGACCATCGTCTCTGA 89
           ||   | ||||| |  ||||    |  |  ||     ||| |   | ||  | | | ||
Db    1927 GGGCAGAGGCCCAGTGGAGCCTCAGACGGCACAGTCAGAGTCGGGGGCCTGCCTGGCCGG 1986

Qy      90 GGATGGAGACTGGTGGACGGTGCTGTCTGAAGTCTCAGGCAGAGAGTATAACATCCCCAG 149
           ||  | || | |  | |  |||| ||| |   ||||  || ||   | |  |||||| ||
Db    1987 GGTCGCAGTCGGCAGCAGCGTGCAGTCCGGCATCTCCCGCGGATGCTTTTCCATCCCAAG 2046

Qy     150 CGTCCACGTGGCCAAAG 166
           | |  ||  |||  ||
Db    2047 TGCCTGCGGAGCCCGAG 2063
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Job time : 50.5859 secs